

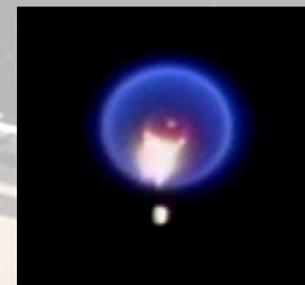


Glenn Research Center



Droplet Combustion Investigations

- ◆ Study of small, spherical individual droplets
- ◆ Provide data on the fundamental aspects of droplet combustion that will provide a basis for comparison to theoretical predictions of burning droplet behaviors.
- ◆ Reflight of the Droplet Combustion Experiment flown on MSL-1
 - Methanol droplets burning in an oxygen/nitrogen environment
- ◆ Bi-Component Droplet Combustion
 - Study liquid species diffusivities and volatility differences
 - Heptane - hexadecane mixtures
 - Measure flame and droplet diameters and sooting behaviors.



Visible flame image



Backlit image



Intensified OH image